

SENNIGER, POWERS, LEAVITT & ROEDEL
One Metropolitan Square
16th Floor
St. Louis, Missouri 63102
Telephone (314) 231-5400
Facsimile (314) 231-4342

FACSIMILE TRANSMITTAL COVER SHEET

DATE: April 8, 2002SPLR FILE #: UMO 1528FACSIMILE NUMBER BEING CALLED: (703) 872-9655

PLEASE DELIVER THE FOLLOWING PAGES TO:

NAME: Examiner Paul Michl

THIS FACSIMILE IS BEING SENT BY:

NAME: Steven M. RitcheyNUMBER OF PAGES: 3 INCLUDING COVER SHEET

TIME SENT: _____

OPERATOR'S NAME: Sue Amsler

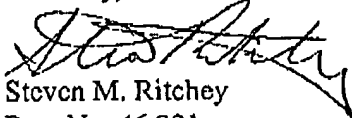
COMMENT(S)/NOTE(S):

Re: U.S. Appln. No. 09/532,839

Attached are the redacted pages for Exhibit A of the Rule 1.131 Declaration filed on March 22, 2002.

Thank you for your assistance.

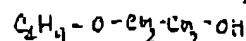
Sincerely,


Steven M. Ritchey
Reg. No. 46,321

This facsimile contains CONFIDENTIAL INFORMATION WHICH ALSO MAY BE LEGALLY PRIVILEGED and which is intended only for the use of the Addressee(s) named above. If you are not the intended recipient of this facsimile, or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any use, dissemination, distribution or copying of this facsimile is strictly prohibited. If you have received this facsimile in error, please immediately notify us by telephone and return the original facsimile to us at the above address via the U.S. Postal Service. Thank you.

IF YOU DO NOT RECEIVE ALL PAGES CLEARLY, CALL BACK AS SOON AS POSSIBLE. CONFIRMING NUMBER: (314) 231-5400.

Formulation		Result from draw-down
	lbs	
H ₂ O	289	General 1% gave a clear good film. Compound x 1% gave hazy and cratering. Gives might be because cpd x has put too much P to solve the problem. amount of cpd x was cut and make up by butylcellulose 1:50.50 ratio butyl cellulose (ethylene glycol monobutyl ether)
PG	43.6	
Trix-100	2.0	
AMP-95	4.0	
Propex 108	434.2	
Dreuplac 453	2.5	
replace the x and 10.0		
Cpd x	3.0	
butyl cellulose	5.0	
H ₂ O	100.18	



(increase hydrophilic film)

After mixing all the components, left the paint overnight before drawing (by 3 mil thick). The results from draw-down was that there were some cratering and the surface of paint was not wet on the kinketa paper.

After the formulation was left for 2 days, the draw-down had been taken again. There were remain some cratering although this time it was better than before (if drawing). The problem might be the surfactant used. So, the wetting agent **Zonyl APC** from Du Pont was added about 15 drops. After mixing Zonyl APC into the formulation, it the cratering problem. Since Zonyl is very expensive thus, we try to find a proper surfactant which has higher or lower HLB than Triton X-102 to replace compare the results so that we can predict the trend and choose the right of surfactant to improve wetting.

Triton X-102	octyl phenyl polyethoxy ethanol	HLB = 13.5
Triton X-102		= 14.6
* Agapol CA-720		= 14.6 From Phone-Paw

2/20/96 Trial with the higher HLB surfactant [Triton X-102, HLB = 14.5]

	lbs	
H ₂ O	289	
PG	43.6	
Triton X-102	2.0	
AMP-95	4.0	
UCAR 839	434.2	
Dreuplac	2.5	
* Cpd x	10.0	
H ₂ O	100.8	
* would be replaced by cpd x + EE, EE, hexanol		

671

Master batch

PE
H₂O
surfactant
trim
pH modifier

} mix together in master batch, then weigh and add coalescer and

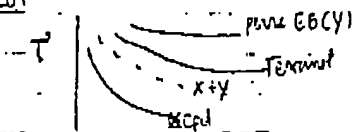
Objective

compare our cpl w/ benchmark = Texanol

Texanol	cpl X (our cpl)	cy) EB (ethylene glycol monobutyl ether)
10%	8%	15
7%	6%	10
12%	11%	5

cpl X (our cpl) is Ethylene glycol soyl derivative

MFFT PLOT

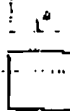
1st year

get MFFT Plot and optimum condition

2nd year

search for new test measuring gloss, adhesion, impact, resistance, hardness

Testing Block Resistance (using Instron)



1) form surface of paint, leave them at different time intervals

2) put A+B together, sit under mass for 10 min

3) remove mass

4) test Instron, see how much force need to apply to pull A+B



The longer time we wait, should be dryer → not stick together, need less force

force



time to let it dry

UCAR 879.6

polyvinyl acrylic

Rastand 825

polyvinyl acetate